

# BIOCHEMISTRY

- \*WHAT CAN I DO WITH MY MAJOR IN BIOCEMISTRY?
- \*WHAT CAN I DO TO MAKE MYSELF MORE MARKETABLE?
- \*WHERE CAN I FIND CAREER INFORMATION?



• CAREER PLANNING • SUNY POTSDAM • 106 SISSON  
HOMEPAGE: [www.potsdam.edu/career](http://www.potsdam.edu/career) TEL: 315-267-2344

## ***WHAT CAN I DO WITH A MAJOR IN BIOCHEMISTRY?***

1. Study of the chemical basis of life.
2. Explore, unravel and understand the structure and function of all living things at the molecular level.
3. Study chemical/molecular composition and behavior of cells and their compounds.
4. Use experimental and analytical techniques to examine living organisms, their component parts, and both the large and small molecules that play a role in the cell's chemistry.
5. Repair and maintain biomedical equipment.
6. Perform tests to find harmful or disease-causing microorganisms in water, food, or the environment.
7. Develop new medical treatment products.

## ***EXAMPLES OF FIELDS OF EMPLOYMENT FOR BIOCHEMISTRY MAJORS:***

1. Academia
2. Hospitals
3. Research Organizations
4. Pharmaceutical Firms
5. Environmental
6. Forensic Organizations
7. Information Technology
8. Medical Research
9. Biotechnology Companies
10. Governmental

## ***SAMPLE JOB TITLES IN THE BIOCHEMISTRY FIELD:***

- \* Nutritionist
- \* Patent Scientist
- \* Toxicology Technician
- \* Researcher
- \* Medical Technician
- \* Molecular - Genetics Technologist
- \* Pharmaceutical Research



## ***SAMPLE JOB DESCRIPTIONS:***

1. Biochemist - studies the chemical composition and behavior of living things. May study the effects of food, hormones, or drugs on various organisms.
2. Molecular-Genetics Technologist - perform complex molecular-based clinical diagnostic assays/tasks according to established operational procedures. Analyze and interpret test results.
3. Toxicology Technician - performs standard testing procedures to qualitatively analyze the presence of drugs in specimens.

## ***ENHANCING EMPLOYABILITY:***

1. Get involved in the career development process early, *freshman year*.
2. Select minors/elective courses that will demonstrate interest/applicability to your career objective.
3. Get career related experience: INTERNSHIPS, summer and/or part-time employment, volunteer. Join a career related association or organization. Undergraduate research with a faculty member.
4. Develop the following job search and self-marketing skills: resume and cover letter writing, portfolio development, researching employers, interviewing, networking, and employment searching.
5. Skills to develop: research and computer, interpretation or translation of collected data, persuasive writing, and presentation skills. A major in a closely related field may increase skills, i.e. chemistry, physics, or environmental.

## ***SAMPLE INTERNSHIP EXPERIENCES:***

- \* Argonne National Laboratory
  - Interns will have an opportunity to publish their research and/or to be selected for an expense-paid trip to present their research at the annual undergrad conference of the National Council on Undergraduate Research.
- \* Pfizer
  - Departments accepting interns include Marketing Research, Human Resources, Tax, Licensing & Development, Sales, Public Affairs, Strategic Planning, Medical Affairs, Finance, Controllers, Engineering, Research & Development, CIT-Corporate Information Technology, and Treasury.

## ***STRATEGIES FOR CONTACTING EMPLOYERS:***

- \* write an employer targeted resume and cover letter
- \* network
- \* learn job search strategies
- \* use SUNY Potsdam's Career Planning Internet Homepage
- \* prepare for the interview
- \* design a portfolio
- \* develop networking card
- \* use SUNY Potsdam's Career Planning Reference books

## ***WHERE TO GET INFORMATION AND ASSISTANCE:***

### **1. CHEMISTRY DEPT., SUNY Potsdam, 309 Stowell Hall**

- \* talk with faculty



### **2. CAREER PLANNING CENTER, SUNY College at Potsdam, 106 Sisson Hall**

- \* individual career assistance
- \* workshops/seminars
- \* employer literature
- \* SUNYCDO Job Fair
- \* computerized assessment programs
- \* career testing
- \* networking assistance
- \* free handouts available
- \* Employment Connections
- \* job vacancies
- \* summer jobs
- \* reference file
- \* career fairs
- \* Career Planning Internet Homepage
- \* career library
- \* alumni contacts
- \* Virtual Job Fair

## ***WHAT IF I WANT TO GO TO GRADUATE SCHOOL?***

### ***RESOURCES AVAILABLE AT THE CAREER PLANNING CENTER:***

- \* graduate school handout
- \* GRE, GMAT, MCAT, LSAT and MAT forms and bulletins (GRE computerized tests and graduate study books)
- \* graduate books-schools and programs
- \* financial aid information about graduate school
- \* Peterson's Graduate Programs (G7F,G,H,I,J,K)

**RESOURCES FOR FINDING EMPLOYERS & CAREER INFORMATION:  
RESOURCES AVAILABLE AT THE CAREER PLANNING CENTER:**

- \* The Career Guide Employment Opportunities Directory (R8GG)
- \* Job Hunter's Sourcebook (R26G)
- \* Dun's Regional Directories (R8I, R8J, R8K)
- \* Summer Jobs for Students (S2A)
- \* Job Opportunities in Health and Science (R17A)
- \* American Hospital Association: Guide to Health Care Field (R17B)
- \* Peterson's Job Opportunities in Engineering & Computer Science (R45D)
- \* Scientific and Technical Organizations & Agencies Directories (R45E, R45F)
- \* Opportunities in Biological Sciences (C6A)
- \* Career in Science (C45C)
- \* Plunkett's Health Care Industry Almanac (R17D)
- \* Directory of American Research & Technology (R43B)
- \* Chemicals Yellow Pages (R45C)
- \* Career Planning Internet Homepage
- \* Additional material found by using Career Planning Library Bibliography



**OTHER SOURCES OF INFORMATION:**

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| <ul style="list-style-type: none"> <li>* The American Institute of Biological Sciences<br/>730 11th St., NW<br/>Washington, DC 20001-4584<br/>(202) 628-1500</li> </ul>            | <ul style="list-style-type: none"> <li>* American Chemical Society<br/>P.O. Box 82229<br/>Columbus, OH 43202-9906<br/>(800) 333-9511</li> </ul>   |
| <ul style="list-style-type: none"> <li>* American Society for Biochemistry and Molecular Biology<br/>9650 Rockville Pike<br/>Bethesda, MD 20814-3996<br/>(301) 530-7145</li> </ul> | <ul style="list-style-type: none"> <li>* Association for Advancement of Medical Instrumentation<br/>3330 Washington Blvd., Suite 400<br/>Arlington, VA 22201-4598<br/>(703) 525-4890</li> </ul> |